# TECHNICAL MEMORANDUM

# **Utah Coal Regulatory Program**

May 2, 2013

TO:

THRU:

Priscilla Burton, Environmental Scientist, Team Lead PWB W865

Ken Hoffman Livia 1

FROM:

Ken Hoffman, Hydrologist 22

RE:

Midterm Permit Review, Alton Coal Development, LLC, Coal Hollow Mine,

C/025/0005, Task ID #4317

## **SUMMARY:**

In accordance with R645-303-211, the Division of Oil, Gas, and Mining (the Division) is required to review each active permit during its term. The Division commenced the Midterm Review for the Coal Hollow Mine on April 2, 2013. A letter of commencement of review was sent to the mine and stated 5 items will be focused on during review. This technical review will focus on item C:

Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

In addition, this memo addresses the permittee's compliance with the hydrology (R645-301-700) section of the Utah Coal Mining Rules. The midterm review is not recommended for approval until the deficiencies are addressed:

R645-301-731.200 The Permittee shall update Table 7-5 to reflect that monitoring station BLM-1 will be monitored for dissolved and total selenium.

R645-301-732.200 The Permittee shall update MRP Appendix 5-2 to reflect the enlarged capacities of Pond 3.

R645-301-742.110 The permittee shall update and add ASCAs and ASCMs and needed to the MRP text and maps. All disturbed area drainage must be clearly depicted on appropriate maps and identified with their respective sediment control measure. A disturbed area acreage calculation for each sediment control area will be provided in the plan in either tabular or narrative form. Designs may be in written, tabular, or graphical form, and must include, at minimum, a generalized description of the methods and elements used to comply with R645-301-742.110. A proposed sediment control measure's design shall include adequate detail to determine the functionality of the specific practice.

#### **TECHNICAL MEMO**

### **TECHNICAL ANALYSIS:**

## **OPERATION PLAN**

## HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

## **Analysis:**

#### **Surface Water Monitoring**

The MRP addresses surface water monitoring network in compliance with the Utah Coal Mining Rules. In addition to typical rules requirements Permit Attachment A Special Conditions #4 calls for the monitoring of selenium where water leaves the minesite during operational and reclamation phases. In compliance with this Condition #4 the Permittee has been monitoring BLM-1, SW-5, SW-6, and SW-9 for dissolved and total selenium as stated in Section 731.200 of the MRP. In what is believed to be an oversight Table 7-5 does not state that BLM-1 will be monitored for selenium. The Permittee has been monitoring for dissolved and total selenium since June 2012.

#### **Sediment Control Measures**

The MRP currently addresses numerous alternative sediment control areas (ASCA) in Section 728.333 such as the Watershed 5 and 6. In addition, the MRP addresses some alternative sediment control measures (ASCM) in Section 728.331, 728.333, and 731 and Drawing 5-3 and 5-26 such as silt fences, straw bales, and straw waddles. Further, during the experiences learned from operation of the facility new ASCMs have been necessary which are not currently reflected in the MRP.

Designs for sediment control measure will be completed by the permittee and submitted to the Division for approval. All disturbed area drainage must be clearly depicted on appropriate maps and identified with their respective sediment control measure. A disturbed area acreage calculation for each sediment control area will be provided in the plan in either tabular or narrative form. Designs may be in written, tabular, or graphical form, and must include, at minimum, a generalized description of the methods and elements used to comply with R645-301-742.110. A proposed sediment control measure's design shall include adequate detail to determine the functionality of the specific practice.

### **Siltation Structures**

#### **TECHNICAL MEMO**

On December 20, 2012 Drawing 5-30 was updated with an enlarged Pond 3 design to allow the operator to better manage their water discharges. However, MRP Appendix 5-2 should have also been updated to reflect the enlarged capacities at the time and must be done so now.

## **Findings:**

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

**R645-301-731.200** The Permittee shall update Table 7-5 to reflect that monitoring station BLM-1 will be monitored for dissolved and total selenium.

**R645-301-732.200** The Permittee shall update MRP Appendix 5-2 to reflect the enlarged capacities of Pond 3.

R645-301-742.110 The permittee shall update and add ASCAs and ASCMs and needed to the MRP text and maps. All disturbed area drainage must be clearly depicted on appropriate maps and identified with their respective sediment control measure. A disturbed area acreage calculation for each sediment control area will be provided in the plan in either tabular or narrative form. Designs may be in written, tabular, or graphical form, and must include, at minimum, a generalized description of the methods and elements used to comply with R645-301-742.110. A proposed sediment control measure's design shall include adequate detail to determine the functionality of the specific practice.

## MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

## **Analysis:**

### **Mining Facilities Maps**

ASCAs and ASCMs are currently shown on Drawings 5-3 and 5-26. In compliance with the requirements discussed in the Sediment Control Measures section of this memo the ASCAs and ASCMs both shall be represented on a map.

### **Findings:**

This finding is address above in this memo in the Operational section of Finding R645-301-742.110.

## **TECHNICAL MEMO**

# **RECOMMENDATIONS:**

The midterm review is not recommended for approval until the deficiencies are addressed.

O:\025005.COL\WG4317\4317KMH.docx